

HEATIT Z-TRM6 Quick Guide



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| 54 305 66 54 305 67 54 305 68 | Ver C | 15.11.2024 |



White RAL 9003 54 305 66 White RAL 9010 54 305 67 Black matt 54 305 68

INTRODUCTION
Heatit Z-TRM6 is an electronic thermostat designed for electrical heating and water based heating control. The thermostat can be controlled through your Z-Wave network, or via the buttons on the front of the thermostat. The thermostat has a user friendly interface.

Heatit Z-TRM6 has 3 modes; Heat - Cool and Eco.

The thermostat fits in standard European junction boxes and may be used with most System 55 frames. It has a sturdy metal frame for secure fastening in the junction box. The thermostat has one built-in room temperature sensor. Two additional external temperature sensors may also be connected.

Heatit Z-TRM6 has active power metering, which allows the user to see the real time power consumption. It also allows you to set the power metering value manually in case of connection with a contactor.

The product has implemented ZeroX™ technology. This technology makes sure the relay switches at 0V when turning on and off. With this technology the thermostat will have a much longer lifetime.

The thermostat can be set up with multiple associations and can be used as a master thermostat. It can control up to 10 thermostats and 10 external relays e.g wall plugs.

The thermostat can withstand a load of max. 16A/3600W at 230VAC. We recommend a contactor for loads above 13A.

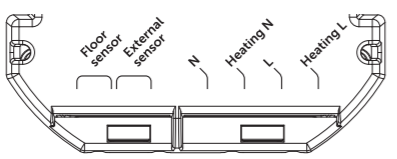


INSTALLATION DISCLAIMER
Installation must be done by a qualified electrician in accordance with national building codes. Before installation, disconnect the power to the device from the mains. During installation of the device, power to the device must be disconnected AT ALL TIMES!

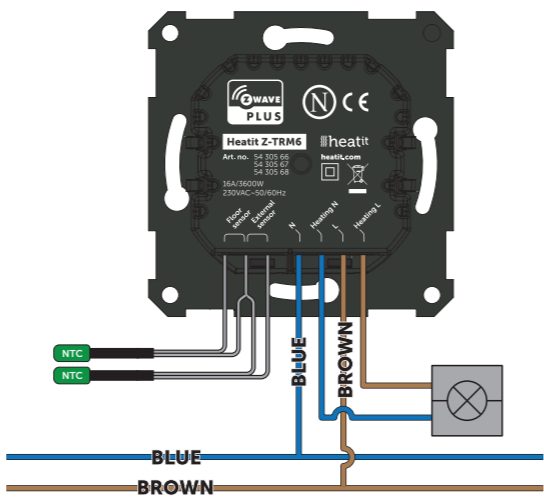
- QUICK START**
- Switch off the mains voltage (disable the fuse).
 - Open the junction box.
 - Connect the wires according to the description in chapter Optional: Connect external wired sensors.
 - After verifying the connections, switch on the mains voltage.
 - Set the primary controller in add mode (security/non security).
 - Hold the Center button until "OFF" is shown in the display (approx. 5 seconds).
 - Press the "+" button once to reach "CON", and hold until the display shows a rotating light pattern.
 - The thermostat will display "INCL" when the thermostat is successfully added. NB! If adding/removing fails, Err (error) will appear.

CONNECTIONS
Max tightening torque terminal screws: 2Nm.
If the cable used has multiple strands using a end sleeve is advised.

To access the terminal screws, hold the sides of the display and gently pull outwards to detach the front piece.



- Floor sensor** NTC type 6.8, 10, 12, 15, 22, 33, 47 or 100kΩ. Default 10kΩ.
- External sensor** NTC type 6.8, 10, 12, 15, 22, 33, 47 or 100kΩ. Default 10kΩ.
- N** Power connection (Neutral) 230VAC.
- Heating N** Heating cable N connection.
- L** Power connection (Live) 230VAC.
- Heating L** Heating cable L connection.



INSTALLATION
Position the thermostat and mount it into the junction box using 2 screws. Position the thermostat front over the part mounted in the junction box, then carefully press the front until it clicks into place. In order to get power metering values, the load needs to be connected to both heating L + N.

ASSOCIATION GROUPS

| GROUPS | DESCRIPTION |
|---|--|
| Group 1 – Used by controller | Lifeline. Max nodes in group: 1 |
| Group 2 – For controlling Relays | Binary Switch Set. Max nodes in group: 10 |
| Group 3 – Used with group 4 to enable Master Thermostat | Thermostat Setpoint set. Max nodes in group: 10 |
| Group 4 – Used with group 3 to enable Master Thermostat | Thermostat Mode set. Max nodes in group: 10 |

If the thermostat is supposed to control a relay, create an association from Group 2 on the thermostat, to the relay that will be controlled.

If the thermostat is supposed to control other thermostats as a Master thermostat, create an association from Group 3 and 4 on the thermostat, to the other thermostats that should be controlled.

ADD/REMOVE
The primary controller/gateway has a mode for adding or removing devices. Please refer to your primary controller manual on how to set the primary controller in add/remove mode. The device may only be added or removed from the network if the primary controller is in add/remove mode. When the device is removed from the network, it will NOT revert to factory settings.

An always listening node must be powered continuously and reside in a fixed position in the installation to secure the routing table. Adding the device within a 2 meter range from the gateway can minimize faults during the Interview process.

There are two ways to add the device to a Z-Wave network.

Standard (Manual)
Add/remove mode is indicated on the device by rotating LED segments on the display. It indicates this for 90 seconds until a timeout occurs, or until the device has been added to/ removed from the network. Configuration mode can also be cancelled by performing the same procedure used for starting Configuration mode.

- Hold the Center button for 5 seconds. The display will show "OFF".
- Press the "+" button once to see "CON" in the display.
- Start the add/remove device process in your primary controller.
- Start the configuration mode on the thermostat by holding the Center button for approximately 2 seconds.

The device is now ready for use with default settings.

NB! When the device is removed from the gateway, the parameters are not reset. To reset the parameters, see "Factory reset". If inclusion fails, please perform a "remove device" process and try again. If inclusion fails again, please see "Factory reset".

SmartStart (Automatic)
SmartStart enabled products may be added to a Z-Wave network by scanning the Z-Wave QR-Code on the product if your primary controller supports SmartStart inclusion. No further action is required and the SmartStart product will be added automatically after being powered on within range of the primary controller.

CHOICE OF SENSOR
The thermostat has multiple sensors and sensor modes. This lets you configure the thermostat to work correctly in most installations. The sensors and modes may be selected from either the local settings menu or via Parameter 2; "Sensor mode ("OPER)".

- Available sensor modes:
- F** Floor sensor
 - A** Internal room sensor
 - AF** Internal room sensor + Floor sensor
 - A2** External room sensor
 - A2F** External room sensor + Floor sensor
 - PWER** Power regulator mode (no sensor used)

NOTE: Some types of floor require that a floor sensor is connected in order to limit the floor temperature to a maximum of 27°C (check the manual from the floor manufacturer). When the thermostat is used in AF or A2F the floor limiter FHI is automatically set to 27°C. When using any other sensor type (A, F or A2) the minimum and maximum limits are 5°C and 40°C respectively.

FACTORY RESET
Enter the menu by holding the Center button for about 5 seconds, navigate in the menu with the "+" button til you see FACT. Press the Center button until you see "-- --" blinking in the display, then hold for about 5 seconds to perform a reset. You may also initiate a reset by holding the Right and Center buttons for 60 seconds.

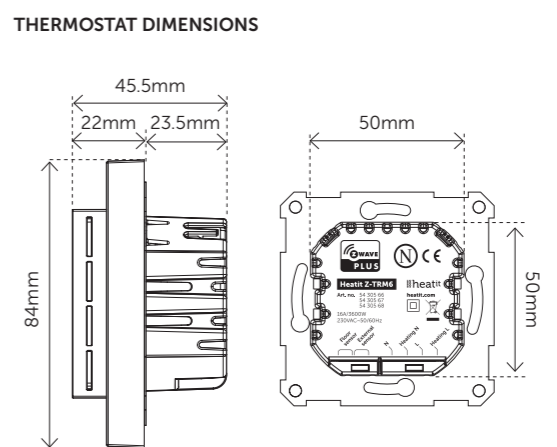
When either of these procedures has been performed, the thermostat will perform a complete factory reset. The device will display "RES" for 5 seconds while performing a factory reset. When "RES" is no longer displayed, the thermostat has been reset.

Please use this procedure only when the primary controller is missing or otherwise inoperable.

- ERROR CODES**
- Err** **Adding fail**
See Manual: Chapter "Add/remove".
 - Err1** **Internal error**
Most probably a faulty unit. Contact support.
 - Err2** **Z-Wave error**
Most probably a faulty unit. Contact support.
 - Err3** **Internal error**
Most probably a faulty unit. Contact support.
 - Err4** **Floor sensor error**
You have chosen F, AF or A2F sensor mode without having a floor sensor connected, or the sensor may be damaged.
 - Err5** **External sensor error**
You have chosen A2 or A2F sensor mode without having an external sensor connected, or the sensor may be damaged.
 - Err6** **Overheating**
Contact your electrician.
 - Err7** **Overload**
Contact your electrician.

DISPLAY ICONS

| ICON | DESCRIPTION |
|------|--|
| | This icon will be displayed while the device is in Heat or Eco mode, and is currently heating. |
| | This icon will be displayed while the relay is on and the device is in Cooling mode. |
| | This icon shows the current signal strength. |



TECHNICAL DATA

| | |
|---|---|
| Protocol | Z-Wave Plus, 868.4MHz |
| Chip | Z-Wave 800 chip |
| Rated voltage | 230VAC 50Hz |
| Max load | 3600W 16A (resistive load) Contactor recommended for loads above 13A |
| Max current | 16A |
| Power consumption | <2W |
| Power regulator | Time cycle 0 to 30 min. |
| Ambient temperature | 5°C to 40°C |
| Temperature range | 5°C to 40°C |
| Storage temperature | -30°C to 70°C |
| Hysteresis | 0.3°C to 3.0°C (default 0.5°C) |
| Humidity | 10% to 85% RH |
| Compatible with NTC-sensor with values | 6.8, 10, 12, 15, 22, 33, 47 or 100kΩ @ 25°C |
| Length NTC sensor | Max. 50 meters |
| Range RF | Min. 40 meter |
| Screw terminals | Max. 2.5mm ² 2Nm |
| IP Code | IP21 |
| Size (LxWxH) | 84 x 84 x 45.5mm |
| Approvals | Z-Wave Plus v2, CE, Nemko |

Working frequency 868.42MHz, Max output power 10.38dBm. The distance between user and products should be no less than 20 cm. There is no restriction to use this product across the EU countries.

Hereby, Heatit Controls AB, declares that this device is in compliance with the essential requirements another relevant provisions of Directive 2014/53/EU.

MAINTENANCE
The product is maintenance-free. Indoor use only.

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

We develop and design our products according in accordance with our strict quality requirements (ISO 9001) and environmental requirements (ISO 14001). All electrical installations must be carried out by an authorized electrical installer. The product must be installed in accordance with our installers manual and national building codes. Any wrongful installation, misuse, damage of the product, is not covered under warranty. Updated documentation is available at www.heatit.com and/or documents.heatit.com. Heatit Controls AB can not be held liable for any type of errors or omissions in our product information. Product specifications may change without further notice.

